IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.(Currently Amended)   A telecommunications system suitable for transmitting real-time data and non-real-time ~~packet~~ data, comprising:

a first station and a second ~~communication~~ station, and

a dual mode channel for communication of both the real-time data and the non-real-time data from the first station to the second station,

wherein

the first station comprises a first transceiver which is operable to transmit both the real-time data and the non-real-time data,

the second station comprises a second transceiver which is operable to receive the real-time station and/or the non-real-time

data, and

the first station further comprises a controller for

generating an output data stream comprising the real-time data, the

controller also allocating the non-real-time ~~packet~~ data to the

output data stream when the data rate of the real-time data is less

than ~~the~~ full data capacity of the dual mode channel so that at

least one frame of the output stream comprises combined data

including both the real time data and the non-real time data, ~~which~~

wherein the output data stream is transmitted by the transceiver

over the channel~~,~~

~~wherein at least one frame of the output stream comprises both~~

~~real time data and non-real time packet data~~ including transmission

of the combined data when the data rate of the real-time data is

less than the full data capacity of the dual mode channel.

2.(Currently Amended) ~~A~~ The telecommunications system as

claimed in claim 1, wherein the real-time data comprises speech

data.

Claim 3 (Canceled)

4. (Currently Amended) A̶ The telecommunications system as claimed in claim 1, wherein the first transceiver comprises a buffer for storing the non-real-time p̶a̶c̶k̶e̶t̶ data for transmission during reductions in the data rate of the real-time data.

5. (Currently Amended) A̶ The telecommunications system as claimed in claim 1, w̶h̶e̶r̶e̶ wherein the first station comprises a base station, and the second station comprises a mobile station of a cellular telecommunications network.

6. (Previously Presented) A telecommunications station for use in a system as claimed in claim 1.

7. (Currently Amended) A method of operating a telecommunications system suitable for transmitting real-time data and non-real-time p̶a̶c̶k̶e̶t̶ data, the system comprising a first station and a second c̶o̶m̶m̶u̶n̶i̶c̶a̶t̶i̶o̶n̶ station and having a dual mode channel for communication of both the real-time data and non-real-time data from the first station to the second station, the first

station comprising a first transceiver which is operable to

transmit both the real-time data and the non-real-time data, the

second station comprising a second transceiver which is operable to

receive the real-time data and/or non-real-time data, wherein the

method comprises the acts of:

controlling the allocation by the first transceiver of the

non-real-time packet data to an output data stream comprising the

real-time data when the a data rate of the real-time data stream is

less than the full data capacity of the dual mode channel so that

at least one frame of the output stream comprises combined data

including both the real time data and the non-real time data, and

controlling the first transceiver to transmit the output data

stream over the channel,

wherein at least one frame of the output stream comprises both

real time data and non-real-time packet data including transmission

of the combined data when the data rate of the real-time data is

less than the full data capacity of the dual mode channel.

Claim 8 (Canceled)

9. (Currently Amended)   A̶ The method as claimed in claim 7

~~wherein the first station comprises a buffer, characterized by~~ ,

further comprising the act of storing the non-real-time ~~packet~~ data

in ~~the~~ a buffer of the first station for transmission during

reductions in the data rate ~~at~~ of the real-time data.

Claims 10-11 (Canceled)

12. (Currently Amended)   A method of transmitting data

comprising the acts of:

allocating at least first, second, and third types of data to

a single output data stream, at least the first type of data being

real-time data, and at least the third type of data being non-real

time ~~packet~~ data, the third type of data being added when ~~the~~ a

data rate of the first type of data and/or second type of data is

less than an expected capacity of a transmission channel so that at

least one frame of the single output data stream comprises combined

data including all three types of data; and

transmitting the single output data stream on a single,

multiple-mode channel~~,~~

~~wherein at least one frame of the single output data stream comprises all three types of data~~ including transmission of the combined data when the data rate of the first type of data and/or the second type of data is less than the expected capacity of the transmission channel.

13.(Currently Amended) The method of claim 12, wherein the first type of data is video and the second type of data is voice.

14.(Currently Amended) A CDMA transmission method comprising the acts of:

combining data of at least two types into a single output data stream, the at least two types comprising variable rate real-time data and non-real-time data, the non-real-time data being added to the output data stream only when an expected capacity of a transmission channel is greater than the ~~data~~ variable rate of the real-time data;

encoding the combined data using a single spreading code, so that the combined data occupies a single transmission channel; and

transmitting the encoded data on the single transmission

channel including transmission of the combined data when the

expected capacity of the transmission channel is greater than the

variable rate of the real-time data;

wherein at least one frame of the output stream comprises the

combined data including both real time data and non-real-time

~~packet~~ data, and at least one frame defining a single transmission.

15.(Currently Amended)   A receiving method comprising the acts

of:

receiving a data stream including at least one frame

comprising both real-time speech data and non-real-time packet data

in a single frame from a transmission channel;

demodulating the data stream;

reading one frame header to determine which part of the frame

~~contain~~ contains the non-real-time packet data and which part of

the frame contains the real-time speech data;

reconstituting the real-time speech data and the non-real-time

packet data;

providing the real-time speech data to a speech decoder; and

providing a speech output signal and a packet data output

signal at distinct output devices.

16.(Currently Amended)   A TDMA transmission method comprising the acts of:

accumulating non-real-time ~~packet~~ data;

allocating real-time data to an output ~~data~~ stream;

determining when the real-time data does not require ~~the~~ full capacity of a transmission channel;

allocating the non-real-time ~~packet~~ data to the output stream, when the real-time data does not require the full capacity so that at least one frame of the output stream comprises combined data including both the real time data and the non-real time data; and

allocating the output ~~data~~ stream to a channel that occupies more than one time slot in a transmission time frame,

~~wherein at least one frame comprises both real-time data and non-real-time packet data~~ for transmission of the combined data on the transmission channel when the real-time data does not require the full capacity of the transmission channel.

17.(Currently Amended)   A TDMA transmission method comprising

the acts of:

allocating non-real-time ~~packet~~ data;

allocating real-time data and the non-real-time ~~packet~~ data in variable proportions to multiple time slots within a transmission time frame when the real-time data does not require ~~the~~ full capacity of a transmission channel ~~wherein~~ <u>so that</u> at least one frame of the transmission time frame comprises both <u>the</u> real-time data and <u>the</u> non-real-time ~~packet~~ data; and

transmitting the transmission time frame<u> including transmission of the combined data when the real-time data does not require the full capacity of the transmission channel</u>.

Claims 18-22 (Canceled)

23. (Currently Amended) ~~A~~ <u>The</u> telecommunications system as claimed in claim 2, wherein the first station comprises a speech coding system which prepares the speech data for transmission from a speech input, and wherein the controller receives timing information from the speech coding system indicating ~~the~~ timing of interruptions in the speech data stream.

24.(Currently Amended)   A The method as claimed in claim 7,
wherein the real time data comprises speech data and the first
communication station comprises a speech coding system which
prepares the speech data for transmission from a speech input,
~~characterized by~~ the method further comprising the act of
determining from the speech coding system ~~the~~ timing of
interruptions in the speech data stream.

Claims 25-26 (Canceled)

27.(Currently Amended)   A receiving method comprising the acts
of:

receiving a data stream including at least one frame
comprising both real-time data and non-real-time ~~packet~~ data from a
single frame;

demodulating the data stream;

reading at least one frame header to determine which part of
the frame contains the real-time data and which part of the frame
contains the non-real-time data;

reconstituting the real real-time data and the non-real-time

data; and

providing the real real-time data and the non-real-time data

to distinct output devices.

28.(Currently Amended)   An output data stream including both

real-time data and non-real-time data in a single frame of a single

dual mode channel, wherein a respective frame header in the output

data stream indicates that both the real-time data and the non-

real-time data reside in the single frame and which part of the

frame has been allocated to the a speech data and which part has

been allocated to the a packet data.

Claim 29 (Canceled)

30.(Currently Amended)   A data stream including both real-time

and non-real-time data in a single frame of a single dual mode

channel, wherein a respective frame header in the data stream

indicates that both the real-time data and the non-real-time data

reside in the single frame and which part of the frame has been

allocated to ~~the~~ a speech data and which part has been allocated to

~~the~~ a packet data.

Claims 31-36 (Canceled)